

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-10. (Cancelled)

11. (Withdrawn) A method of diagnosing a subject as having, or having a propensity to develop, pre-eclampsia or eclampsia, said method comprising measuring the level of sFlt-1, VEGF, or PlGF nucleic acid molecule in a sample from said subject and comparing it to a reference sample, wherein an alteration in said levels diagnoses pre-eclampsia or eclampsia in said subject, or diagnoses a propensity to develop pre-eclampsia or eclampsia.

12. (Withdrawn) A method of diagnosing a subject as having, or having a propensity to develop, pre-eclampsia or eclampsia, said method comprising determining the nucleic acid sequence of a sFlt-1, VEGF, or PlGF gene in a sample from a subject and comparing it to a reference sequence, wherein an alteration in the subject's nucleic acid sequence that is an alteration that changes the expression level of the gene product in said subject diagnoses the subject with pre-eclampsia or eclampsia, or a propensity to develop pre-eclampsia or eclampsia.

13-21. (Cancelled)

22. (Withdrawn) The method of claims 1, 2, 11, or 12, wherein said subject is a non-pregnant human and method diagnoses a propensity to develop pre-eclampsia or eclampsia.

23. (Cancelled)

24. (Withdrawn) The method of claims 1, 2, 11, or 12, wherein said subject is a post-partum human.

25. (Withdrawn) The method of claims 1, 2, 11, or 12, wherein said subject is a non-human.

26. (Withdrawn) The method of claims 1, 2, 11, or 12, wherein said subject is a non-human selected from the group consisting of a cow, a horse, a sheep, a pig, a goat, a dog, or a cat.

27-32. (Cancelled)

33. (Withdrawn) A kit for the diagnosis of pre-eclampsia or eclampsia in a subject comprising a nucleic acid sequence selected from the group consisting of sFlt-1, VEGF, and PlGF nucleic acid molecule or a sequence complementary thereto, or any combination thereof.

34. (Withdrawn) The kit of claim 33, wherein said nucleic acid sequence comprises at least two nucleic acid probes for the detection of said nucleic acid molecule.

35. (Withdrawn) A kit for the diagnosis of pre-eclampsia or eclampsia in a subject comprising a means of detecting a sFlt-1, VEGF, or PlGF polypeptide, or any combination thereof.

36. (Withdrawn) The kit of claim 35, wherein said means of detecting is selected from the group consisting of an immunological assay, an enzymatic assay, and a colorimetric assay.

37. (Withdrawn) The kit of claims 33 or 35, wherein said kit diagnoses a propensity to develop pre-eclampsia or eclampsia in a pregnant or a non-pregnant subject.

38. (Withdrawn) The kit of claims 33 or 35, wherein said kit detects sFlt-1.

39. (Withdrawn) The kit of claims 33 or 35, wherein said kit detects PlGF.

40. (Withdrawn) The kit of claims 33 or 35, wherein when said kit detects VEGF, sFlt-1 or PlGF is also detected.

41. (New) A method of diagnosing a subject as having, or having a propensity to develop, pre-eclampsia or eclampsia, said method comprising measuring the level of sFlt-1 polypeptide in a sample from said subject, wherein a level of sFlt-1 polypeptide greater than 2 ng/ml diagnoses said subject as having, or having a propensity to develop, pre-eclampsia or eclampsia.

42. (New) A method of diagnosing a subject as having, or having a propensity to develop, pre-eclampsia or eclampsia, said method comprising measuring the level of free PlGF polypeptide in a serum sample from said subject, wherein said subject is pregnant and a level of free PlGF polypeptide less than 150 pg/ml serum at 13-16 weeks of pregnancy diagnoses said subject as having, or having a propensity to develop, pre-eclampsia or eclampsia.

43. (New) A method of diagnosing a subject as having, or having a propensity to develop, pre-eclampsia or eclampsia, said method comprising measuring the level of free PlGF polypeptide in a serum sample from said subject, wherein said subject is pregnant and a level of free PlGF polypeptide less than 400 pg/ml serum at mid-gestation diagnoses said subject as having, or having a propensity to develop, pre-eclampsia or eclampsia.

44. (New) A method of diagnosing a subject as having, or having a propensity to develop, pre-eclampsia or eclampsia, said method comprising measuring the level of free VEGF polypeptide in a sample from said subject, wherein said subject is pregnant and a level of free VEGF polypeptide less than 5 pg/ml serum diagnoses said subject as having, or having a propensity to develop, pre-eclampsia or eclampsia.

45. (New) A method of diagnosing a subject as having, or having a propensity to develop, pre-eclampsia or eclampsia, said method comprising measuring the levels of at least two of sFlt-1, free VEGF, and free PlGF polypeptide in a sample from said subject.

46. (New) The method of claim 45, further comprising calculating the relationship between said levels of at least two of sFlt-1, free VEGF, and free PlGF using a metric.

47. (New) The method of claim 46, wherein said metric is a pre-eclampsia anti-angiogenic index (PAAI): $\frac{sFlt-1}{free\ VEGF + free\ PlGF}$.

48. (New) The method of claim 47, wherein a PAAI value greater than 20 is a diagnostic indicator of pre-eclampsia or eclampsia.

49. (New) The method of claim 46, wherein said metric is sFlt-1/free PlGF.

50. (New) A method of diagnosing a subject as having, or having a propensity to develop, pre-eclampsia or eclampsia, said method comprising measuring the level of at least one of sFlt-1, free VEGF, or free PlGF polypeptide in a sample from a subject and comparing the level to the level of sFlt-1, free VEGF, or free PlGF polypeptide in a reference, wherein an increase in the level of sFlt-1 or a decrease in the level of free VEGF or free PlGF polypeptide relative to said reference diagnoses said subject as having, or having a propensity to develop, pre-eclampsia or eclampsia.

51. (New) The method of claim 50, wherein at least two of said sFlt-1, free VEGF, or free PlGF polypeptide levels in said sample from said subject are measured and compared to the reference.

52. (New) The method of claim 51, further comprising calculating the relationship between said levels of at least two of said sFlt-1, free VEGF, or free PlGF polypeptide using a metric, wherein an alteration in the metric value from said subject sample as compared to said reference diagnoses said subject as having, or having a propensity to develop, pre-eclampsia or eclampsia.

53. (New) The method of claim 52, wherein said metric is PAAI or sFlt-1/PlGF and an increase in the PAAI or sFlt-1/PlGF value from said subject sample compared to the PAAI or sFlt-1/PlGF value from said reference diagnoses said subject as having, or having a propensity to develop, pre-eclampsia or eclampsia.

54. (New) The method of claim 52, wherein said metric further comprises the body mass index or gestational age of the subject.

55. (New) The method of claim 50 or 52, wherein said reference is a prior sample or level from said subject.

56. (New) The method of claim 50 or 52, wherein said reference is a sample taken from a control subject not having pre-eclampsia or eclampsia.

57. (New) The method of claim 41, 45, or 50, wherein said subject is a pregnant human.

58. (New) The method of claim 41, 44, 45, or 50, wherein said subject is in the first trimester of pregnancy.

59. (New) The method of claim 41, 44, 45, or 50, wherein said subject is in the second trimester of pregnancy.

60. (New) The method of claim 41, 44, 45 or 50, wherein said subject is in the third trimester of pregnancy.

61. (New) The method of claim 41, 44, 45, or 50, wherein said subject is 13-16 weeks pregnant.

62. (New) The method of claim 41, 44, 45, or 50, wherein said measuring is done using an immunological assay.

63. (New) The method of claim 62, wherein said immunological assay is an ELISA.

64. (New) The method of claim 41, 44, 45, or 50, wherein said sample is a bodily fluid, cell, or tissue of said subject in which said sFlt-1, free VEGF, or free PlGF is normally detectable.

65. (New) The method of claim 64, wherein said bodily fluid is selected from the group consisting of urine, amniotic fluid, serum, plasma, or cerebrospinal fluid.

66. (New) The method of claim 64, wherein said cell is selected from the group consisting of an endothelial cell, a leukocyte, a monocyte, and a cell derived from the placenta.

67. (New) The method of claim 64, wherein said tissue is a placental tissue.

68. (New) A method of diagnosing a subject as having, or having a propensity to develop, HELLP, IUGR, or SGA, said method comprising measuring the level of sFlt-1, free VEGF, or free PlGF polypeptide in a sample from said subject.

69. (New) The method of claim 68, further comprising comparing the level of sFlt-1, free VEGF, or free PlGF polypeptide from said subject to the level of sFlt-1, free VEGF, or free PlGF polypeptide from a reference sample, wherein an increase in the level of said sFlt-1 or a decrease in the level of said free VEGF or free PlGF relative to a said reference sample diagnoses said subject as having, or having a propensity to develop, HELLP, IUGR, or SGA.